iP4700 / iP4760

SIMPLIFIED SERVICE MANUAL

1. LIST OF ERROR DISPLAY
2. ADJUSTMENT / SETTINGS

QY8-13CM-000

Rev.00

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Canon Inc.

1. LIST OF ERROR DISPLAY

1-1. Operator Call Errors (Alarm LED Lit In Orange)

Errors and warnings are displayed by the following ways:

- Operator call errors are indicated by the Alarm LED lit in orange, and messages are displayed on the printer driver Status Monitor.
- Error codes (the latest 10 error codes at the maximum) are printed in the "operator call/service call error record" area in EEPROM information print.

Buttons valid when an operator call error occurs:

- Power button: To turn the printer off and on again.
- Resume/Cancel button: To cancel the job at error occurrence, and to clear the error.

LED (Blinking in orange)	Error	Error code	Solution	Remarks
2 times	No paper in the rear tray.	[1000]	Confirm that the rear tray is selected as the paper source. Set the paper in the rear tray, and press the Resume/Cancel button.	
	No CD / DVD tray	[1001]	Set the CD / DVD tray, and press the Resume/Cancel button.	
	No CD or DVD	[1002]	Set a CD or DVD in the CD / DVD tray, and inset the CD / DVD tray in the proper position. Then, press the Resume/Cancel.	
	No paper in the cassette.	[1003]	Confirm that the cassette is selected as the paper source. Set the paper in the cassette, and press the Resume/Cancel button.	
3 times	Paper jam.	[1300]	Remove the jammed paper, and press the Resume/Cancel button.	
	Paper jam in the rear guide.	[1303]		
	Paper jam in the under guide.	[1304]		
	The front door is closed.	[1250]	Open the front door.	The error is detected at the start of printing or during printing.
4 times	Ink may have run out.	[1600]	Replace the applicable ink tank and close the cover.	When the error is cleared by pressing the Resume/Cancel button, ink may run out during printing.
	Ink tank not installed.	[1660]	Install the applicable ink tank(s) properly, and confirm that the LED's of all the ink tanks light in red.	

LED (Blinking in orange)	Error	Error code	Solution	Remarks
5 times	Print head not installed, or not properly installed.	[1401]	Install the print head properly.	
	Faulty print head ID.		Re-set the print head. If the error is not cleared, the print head may be defective. Replace the print head.	
	Print head temperature sensor error.	[1403]		
	Faulty EEPROM data of the print head.	[1405]		
6 times	Inner cover error.	[1841*2, 1846*2, 1851*1, 1856*1]	Close the inner cover, and press the Resume/Cancel button.	
		[1850*1, 1855*1]	Open the inner cover, place the CD-R tray and press Resume/Cancel.	
	Time-out in CD / DVD print operation.	[1830*1]	A prescribed period of time (12 minutes) has elapsed without any printing since printing was attempted. Press the Resume/Cancel button to clear the error.	
7 times	Multiple ink tanks of the same color installed.	[1487]	Replace the wrong ink tank(s) with the correct one(s).	
	Ink tank in a wrong position.	[1680]	Install the ink tank(s) in the correct position.	
8 times	Warning: The ink absorber becomes almost full.	[1700/ 1701]	Replace the ink absorber, and reset its counter. [See 2-2. Adjustment / Settings, (4) Service mode] Pressing the Resume/Cancel button will exit the error, and enable printing without replacing the ink absorber. However, when the ink absorber becomes full, no further printing can be performed unless the applicable ink absorber is replaced.	The error “The ink absorber becomes almost full (service call)” may occur soon.
9 times	The connected digital camera or digital video camera does not support Camera Direct Printing.	[2001]	Remove the cable between the camera and the printer.	

LED (Blinking in orange)	Error	Error code	Solution	Remarks
10 times	Automatic duplex printing cannot be performed.	[1310]	The paper length is not supported for duplex printing. Press the Resume/Cancel button to eject the paper being used at error occurrence. Data which was to be printed on the back side of paper at error occurrence is skipped (not printed).	Data which was to be printed on the back side of paper at error occurrence is not printed.
11 times	Failed in automatic print head alignment.	[2500]	Press the Resume/Cancel button to clear the error, then perform the automatic print head again. (In the iP4700 / iP4760, use Matte Photo Paper MP-101.)	
13 times	The remaining ink amount unknown.	[1683]	Replace the applicable ink tank with a new one. Printing with a once-empty ink tank can damage the printer. To continue printing without replacing the ink tank(s), press the Resume/Cancel button for 5 sec. or longer to disable the function to detect the remaining ink amount. After the operation, it is recorded in the printer EEPROM that the function to detect the remaining ink amount was disabled.	The ink tank installed is judged to have once been empty.
14 times	Ink tank not recognized.	[1684]	A non-supported ink tank (an ink tank that is sold in a different region from where the printer was purchased) is installed (the ink tank LED is turned off). Install the supported ink tanks.	
15 times	Ink tank not recognized.	[1682]	A hardware error occurred in an ink tank (the ink tank LED is turned off). Replace the ink tank(s).	

LED (Blinking in orange)	Error	Error code	Solution	Remarks
16 times	No ink (no raw ink).	[1688]	Replace the empty ink tank(s), and close the scanning unit (cover). Printing with an empty ink tank can damage the printer. To continue printing without replacing the ink tank(s), press the Resume/Cancel button for 5 sec. or longer to disable the function to detect the remaining ink amount. After the operation, it is recorded in the printer that the function to detect the remaining ink amount was disabled.	
19 times	Non-supported hub	[2002]	Remove the applicable USB hub from the PictBridge (USB) connector.	

*1: Only for models supporting CD / DVD printing
*2: Only for models not supporting CD / DVD printing

1-2. Service Call Errors (by Cyclic Blinking of Alarm and Power LEDs)

Cycles of blinking of Alarm and Power LEDs	Error	Error code	Conditions	Solution (Check points and replacement items)
2 times	Carriage error	[5100]	An error occurred in the carriage encoder signal.	1) Smearing or scratches on the carriage slit film; clean the timing slit film. 2) Foreign material or paper debris that obstructs the carriage movement; remove foreign material. 3) Ink tank conditions; re-set the ink tanks. 4) Cable connection 5) Part replacement: - Timing slit disk film - Carriage unit - Logic board - Carriage motor
3 times	Line feed error	[6000]	An error occurred in the LF encoder signal.	1) Smearing or scratches on the LF / EJ slit film; clean the LF / EJ slit film. 2) Foreign material or paper debris in the LF drive; remove foreign material. 3) Cable connection 4) Part replacement: - LF / EJ slit film - LF / EJ timing sensor unit - Paper feed roller unit - Logic board - Paper feed motor
4 times	Purge cam sensor error	[5C00]	An error occurred in the purge unit.	1) Foreign material or paper debris around the purge drive system unit; remove foreign material. 2) Cable connection 3) Part replacement: - Purge drive system unit - Logic board
5 times	ASF (cam) sensor error	[5700]	An error occurred in the ASF cam sensor.	1) Cable connection 2) Part replacement: - ASF unit - PE sensor board unit - Logic board
6 times	Internal temperature error	[5400]	The internal temperature is not normal.	1) Cable connection 2) Part replacement: - Carriage unit - Logic board - Print head

Cycles of blinking of Alarm and Power LEDs	Error	Error code	Conditions	Solution (Check points and replacement items)
7 times	Ink absorber full	[5B00, 5B01]	The ink absorber is supposed to be full. Error codes: 5B00: Main ink absorber is full (overseas). 5B01: Main ink absorber is full (Japan).	1) Ink absorber condition 2) Part replacement: - Ink absorber kit 3) Ink absorber counter value in the EEPROM; reset the ink absorber counter.
8 times	Print head temperature rise error	[5200]	The print head temperature exceeded the specified value.	1) Print head condition 2) Head contact pin condition of the carriage unit 3) Cable connection 4) Part replacement: - Print head - Logic board - Carriage unit
9 times	EEPROM error	[6800, [6801]	A problem occurred in reading from or writing to the EEPROM.	1) Part replacement: - Logic board
10 times	VH monitor error	[B200]	The print head voltage is abnormal.	1) Head contact pin condition of the carriage unit 2) Cable connection (especially the carriage FFC) 3) Part replacement: - Print head and logic board (Replace them at the same time.) - Power supply unit - Carriage unit
11 times	Carriage lift mechanism error	[5110]	The carriage did not move up or down properly.	1) Foreign material or paper debris that obstructs the carriage movement; remove foreign material. 2) Part replacement: - Switch system unit - Carriage unit
12 times	APP position error	[6A80]	An error occurred in the APP motor.	1) Foreign material or paper debris around the purge drive system unit; remove foreign material, and confirm that the ink absorber right beneath the purge drive system unit stays in place and does not contact the unit. 2) Foreign material or paper debris around the ASF unit; remove foreign material. 3) Cable connection 4) Part replacement: - Purge drive system unit - Logic board
14 times	APP sensor error	[6A90]	An error occurred during paper feeding or paper ejection.	

Cycles of blinking of Alarm and Power LEDs	Error	Error code	Conditions	Solution (Check points and replacement items)
	Paper feed cam sensor error	[6B10]	An error occurred in the paper feed cam sensor during paper feeding from the cassette, or the paper absorbing a large amount of ink jammed in the PF rear guide.	1) Jammed paper in the PF rear guide (when a large amount of ink was absorbed in the paper); remove the jammed paper and foreign material. 2) Foreign material or paper debris in the cassette or in the PF rear guide; remove foreign material. 3) Part replacement: - PF pick-up unit - Logic board
15 times	USB Host VBUS overcurrent	[9000]	The USB Host VBUS is overloaded.	1) Part replacement: - Logic board
16 times	Pump roller sensor error	[5C20]	The pump roller position cannot be detected.	1) Cable connection 2) Part replacement: - Purge drive system unit
17 times	Paper eject encoder error	[6010]	Paper eject encoder error	1) Smearing or scratches on the LF / EJ slit film; clean the LF / EJ slit film. 2) Foreign material or paper debris in the paper path; remove foreign material. 3) Cable connection 4) Part replacement: - LF / EJ slit film - LF / EJ timing sensor unit - Platen unit - Logic board - Paper feed motor
19 times	Ink tank position sensor error	[6502]	None of the ink tank position is detected.	1) Ink tank position; confirm the ink tank position. 2) Re-set or replacement of ink tanks 3) Cable connection 4) Part replacement: - Spur unit - Logic board
20 times	Other errors	[6500]	An unidentified error occurred.	1) Part replacement: - Logic board
21 times	Drive switch error	[C000]	Drive was not switched properly.	1) Foreign material or paper debris in the drive switch area; remove foreign material, confirm the ink tank conditions, or re-set the ink tanks properly. 2) Part replacement: - Purge drive system unit - ASF unit - Carriage unit

Cycles of blinking of Alarm and Power LEDs	Error	Error code	Conditions	Solution (Check points and replacement items)
23 times	Valve cam sensor error	[6C10]	The valve cam sensor was faulty at power-on or when purging was attempted.	1) Foreign material or paper debris around the purge drive system unit; remove foreign material. 2) Cable connection 3) Part replacement: - Purge drive system unit - Logic board

Note: Before replacement of the logic board ass'y, check the ink absorber counter value (by service test print or EEPROM information print). If the counter value is 7% or more, also replace the ink absorber kit when replacing the logic board ass'y. If the counter value is less than 7%, register the current ink absorber counter value to the replaced new logic board instead.

2. ADJUSTMENT / SETTINGS

2-1. Service Mode

< Service mode operation procedures >

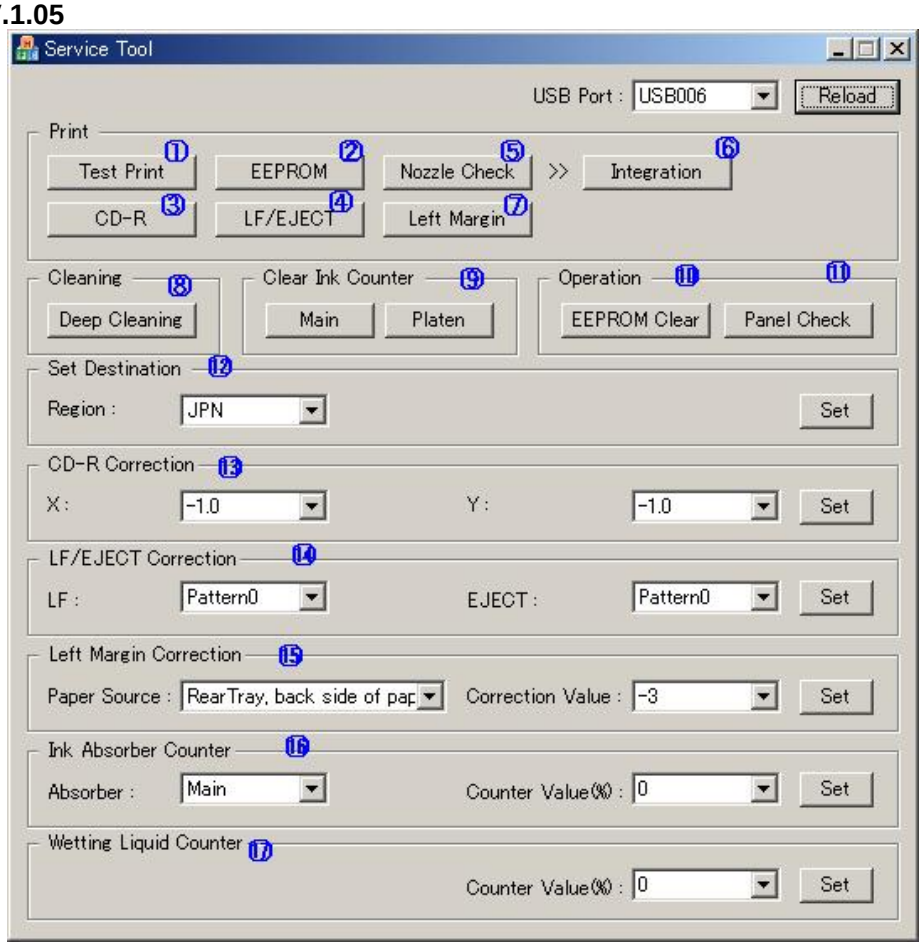
Use the Service Tool on the connected computer.

1) Start the printer in the service mode.
   i. With the printer power turned off, while pressing the Resume/Cancel button, press and hold the Power button. (DO NOT release the buttons).
   ii. When the Power LED lights in green, while holding the Power button, release the Resume/Cancel button. (DO NOT release the Power button.)
   iii. While holding the Power button, press the Resume/Cancel button 2 times, and then release both the Power and Resume/Cancel buttons. (Each time the Resume/Cancel button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in green, starting with Alarm LED.)
   iv. When the Power LED lights in green, the printer is ready for the service mode operation.

2) Start the Service Tool on the connected computer.
   i. When a button is clicked in the Service Tool dialog box, that function is performed. During operation of the selected function, all the Service Tool buttons are dimmed and inactive.
   ii When the operation is completed, "A function was finished." is displayed, and another function can be selected.
   iii If a non-supported function is selected, "Error!" is displayed. Click **OK** in the error message dialog box to exit the error.

< Service Tool Functions >

V.1.05



No.	Name	Function	Remarks
(1)	Test Print	Service test print	Paper (2 sheets) will feed from the rear tray. Service test print items: - Model name - ROM version - USB serial number - EEPROM information - Process inspection information - Barcode (model name + destination + printer serial number) - Ink system function check result - CD / DVD sensor check result (printed on the second sheet)
(2)	EEPROM	EEPROM information print	The dialog box opens to select the paper source. Select **Rear tray** or **Cassette**, and click **OK**. EEPROM information print items: - Model name - ROM version - Ink absorber counter value (ink amount in the ink absorber) - Print information - Error information, etc.
(3)	CD-R	CD-R check pattern print	For refurbishment use. Not used in servicing.
(4)	LF / EJECT	LF / Eject correction pattern print	Perform LF / Eject correction only when streaks or uneven printing occurs after the repair. See “LF / Eject correction” below for details.
(5)	Nozzle Check	Nozzle check pattern print	The dialog box opens to select the paper source. Select **Rear tray** or **Cassette**, and click **OK**.
(6)	Integration	Successive print of (1) service test pattern, (2) EEPROM information, and (5) nozzle check pattern	Paper will feed from the rear tray.
(7)	Left Margin	Left margin pattern print	Not used.
(8)	Deep Cleaning	Print head deep cleaning	Cleaning of both Black and Color at the same time.
(9)	Main	Main ink absorber counter resetting	Set a sheet of A4 or Letter sized plain paper. After the ink absorber counter is reset, the counter value is printed automatically.
	Platen	Platen ink absorber counter resetting	Not used.

No.	Name	Function	Remarks
(10)	EEPROM Clear	EEPROM initialization	The following items are NOT initialized, and the shipment arrival flag is not on: - USB serial number - Destination settings - Record of ink absorber counter resetting and setting - Record of repair at the production site - CD / DVD print position correction value - LF / Eject correction values - Left margin correction value - Production site E-MIP correction value and enabling of it - Endurance correction value and enabling of it - Record of disabling the function to detect the remaining ink amount - Ink absorber counter value (ink amount in the ink absorber)
(11)	Panel Check	Button and LCD test	Not used.
(12)	Set Destination	Destination settings	Select the destination, and click **Set**. ASA, AUS, BRA, CHN, CND, EUR, JPN, KOR, LTN, TWN, USA
(13)	CD-R Correction	CD / DVD print position correction (X and Y direction)	Also for printing of the CD / DVD check pattern in refurbishment operation. The reference center in the X direction and in the Y direction can be adjusted respectively. (Adjustable range between -1.0 mm to +1.0 mm, in 0.1 mm increment)
(14)	LF / EJECT Correction	LF / Eject correction value setting	Set the correction value according to the result of (4) LF / Eject correction pattern print. See " LF / Eject correction " below for details.
(15)	Left Margin Correction	Left margin correction value setting	Not used.
(16)	Ink Absorber Counter	Ink absorber counter setting	See " Ink absorber counter setting " below.
(17)	Wetting Liquid Counter	Wetting liquid counter setting	Not used.

< LF / Eject correction **>**

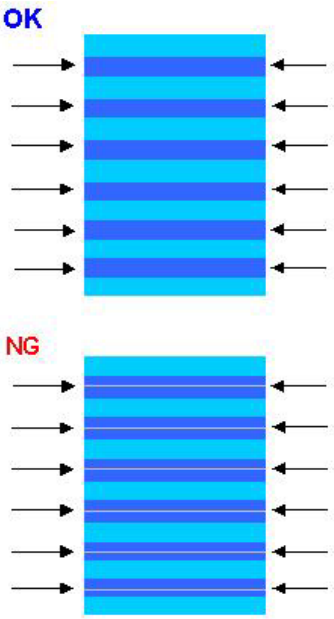
After replacement of the feed roller, platen unit, LF / Eject encoder, encoder film, or logic board in repair servicing or in refurbishment operation, perform the adjustment to maintain the optimal print image quality.

1) Print the LF / Eject correction pattern.

Click **LF/EJECT** of the Service Tool on the connected computer, select the paper source and the paper type, and print the pattern. 5 sheets of paper will be used for the pattern printing.

- Paper source: Select either **Rear tray** or **Cassette**.
- Media type: Select one from **HR-101**, **GF-500/Office Planner**, **HP Bright White**, and **Canon Extra/STEINBEIS**.

2) When printing is finished, the printer returns to be ready for selection of another function.
3) In the printout, determine the Pattern No. in which streaks or lines are the least noticeable for the LF check pattern and the Eject check pattern respectively. (LF Pattern No. 0 to 4, Eject Pattern No. 0 to 4)



4) In the **LF/EJECT Correction** section of the Service Tool, select the Pattern No. (from 0 to 4) determined in step 3) for **LF** and **EJECT** respectively, and click **Set**.
5) The selected LF and Eject correction values are written to the EEPROM, making the E-MIP correction value (which was set at shipment from the production site) invalid.

Note: At the production site, the E-MIP correction, which is equivalent to the LF / Eject correction, is performed using the special tool, and the E-MIP correction value is written to the EEPROM as the valid data.
When LF / Eject correction is performed, the LF / Eject correction values become valid instead of the E-MIP correction value (thus, in the initial EEPROM information print, "LF = *" and "EJ = *" are printed, but the selected values are printed after the LF / Eject correction).

<Ink absorber counter setting>

Set the ink absorber counter value to a new EEPROM after the logic board is replaced in servicing.

1) Before replacement of the logic board, check the ink absorber counter value in EEPROM information print.
2) After replacement of the logic board, the ink absorber counter value should be set in the service mode using the Service Tool.
In the **Ink Absorber Counter** section of the Service Tool, select **Main** from the **Absorber** pull-down menu.
From the **Counter Value(%)** pull-down menu, select the value (in 10% increments) which is the closest to the actual counter value confirmed before replacement of the logic board, and click **Set**.
3) Print EEPROM information to confirm that the value is properly set to the EEPROM.

<CD / DVD print position correction>

Set the CD / DVD print position value to a new EEPROM after the logic board is replaced in servicing.

Note: For solution of user complaints, this function can be used, however, use of the application software is recommended to adjust the CD / DVD print position.

1) Before replacement of the logic board, check the CD / DVD print position value in EEPROM information print.
2) After replacement of the logic board, set the print position value in **CD-R Correction** of the Service Tool.
3) If EEPROM information is not available before replacement of the logic board due to logic board failure, etc., click **CD-R** in the Service Tool to print the CD-R check pattern, and confirm that the intersection of the axes Y and X is at the center of the CD / DVD.

2-2. User Mode

Function	Procedures	Remarks
Nozzle check pattern printing	Perform from the printer driver Maintenance tab, or see "Standalone printer operation" below.	Set a sheet of plain paper (A4 or Letter) in the cassette, or the rear tray if selected.
Print head manual cleaning	Perform from the printer driver Maintenance tab. - Cleaning of both Black and Color - Cleaning Black or Color separately	Unclogging of the print head nozzles, and maintenance to keep the print head conditions good. If there is a missing portion or white streaks in the nozzle check pattern printout, perform this cleaning.
Print head deep cleaning	Perform from the printer driver Maintenance tab.	If print head cleaning is not effective, perform this cleaning. Since the deep cleaning consumes more ink than regular cleaning, it is recommended to perform deep cleaning only when necessary.
Automatic print head alignment	Perform from the printer driver Maintenance tab.	Set 1 sheet of A4 Matte Photo Paper (MP-101) in the rear tray. If automatic alignment is not effective, perform manual print head alignment.
Manual print head alignment	Perform from the printer driver Maintenance tab.	Set 3 sheets of plain paper (A4 or Letter) in the cassette, or the rear tray if selected.
Print head alignment value printing	Perform from the printer driver Maintenance tab.	Confirmation of the current print head alignment values.
Paper feed roller cleaning	Perform from the printer driver Maintenance tab.	The paper feed rollers of the selected paper source (the rear tray or the cassette) rotate while being pushed to the paper lifting plate. Since the rollers will wear out in this cleaning, it is recommended that you perform this only when necessary.
Bottom plate cleaning	Perform from the printer driver Maintenance tab, or see "Standalone printer operation" below.	Cleaning of the platen ribs when the back side of paper gets smeared. Fold a sheet of plain paper (A4 or Letter) in half crosswise, then unfold and set it in the rear tray with the folded ridge facing down. (No paper feeding from the cassette)

< Standalone printer operation >

1) Turn on the printer in the user mode.
2) Press and hold the Resume/Cancel button until the Power LED blinks in green the specified number of times listed in the table below, and release it. The operation starts.

Power LED (blinking in green)	Operation	Remarks
1 time	Manual print head cleaning	
2 times	Nozzle check pattern printing	Set a sheet of plain paper (A4 or Letter) in the cassette.

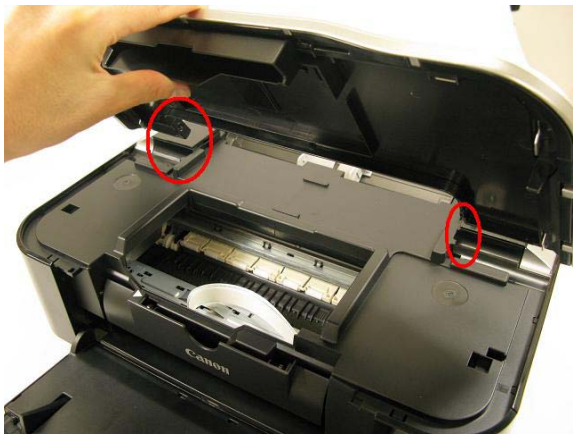
Power LED (blinking in green)	Operation	Remarks
5 times	Bottom plate cleaning	

2-3. Special Notes on Assembling

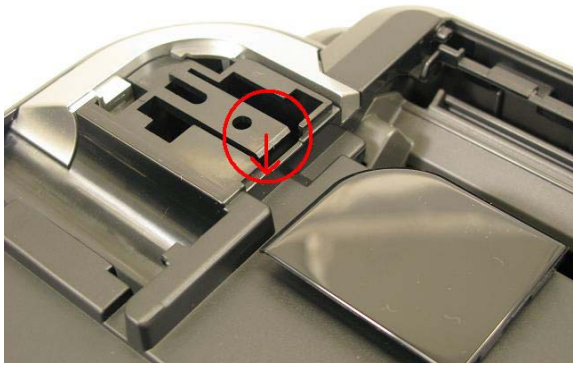
(1) External housing removal

1) Remove the cassette.

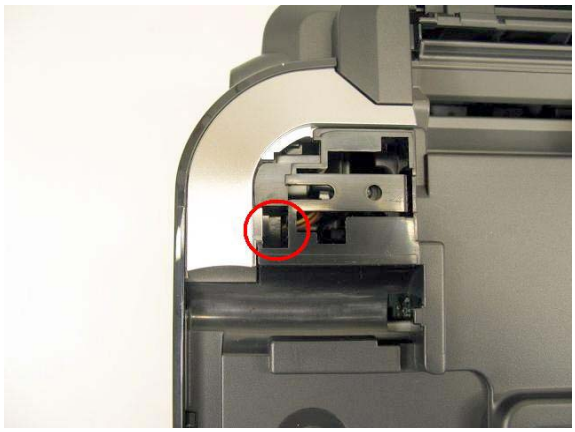
2) Remove the paper support unit and the access cover.
< While pushing the both sides of the paper support so that the center will warp slightly, release the left and right bosses. >

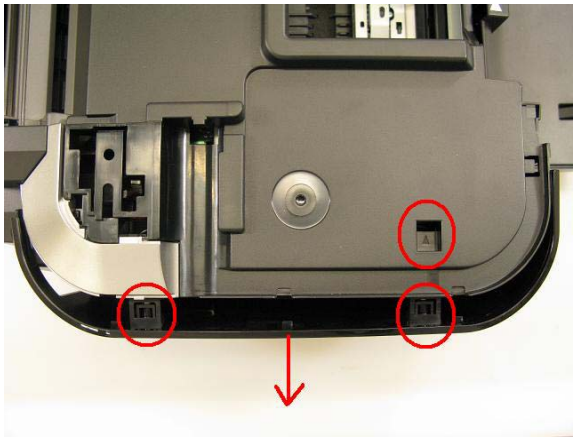


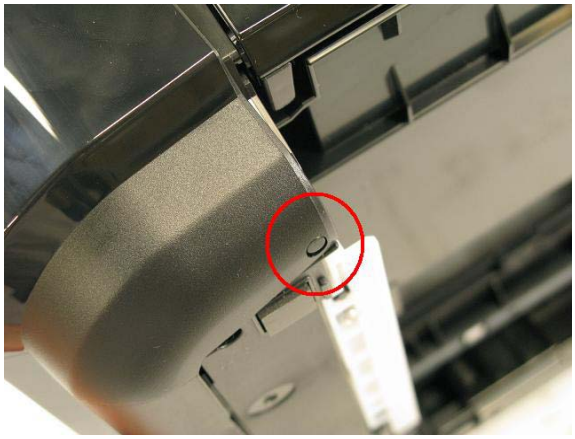
3) Remove the main case covers L and R.
< While inserting a flat-blade screwdriver, etc. through into a space under the main case cover; and pressing the claw downward, slide the main case cover toward the front side of the printer. >



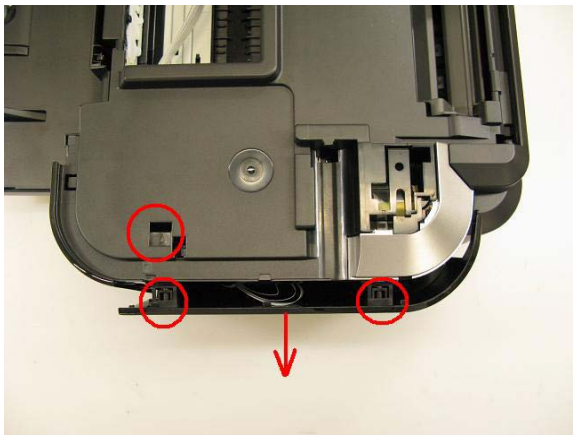
4) Remove the side cover L.

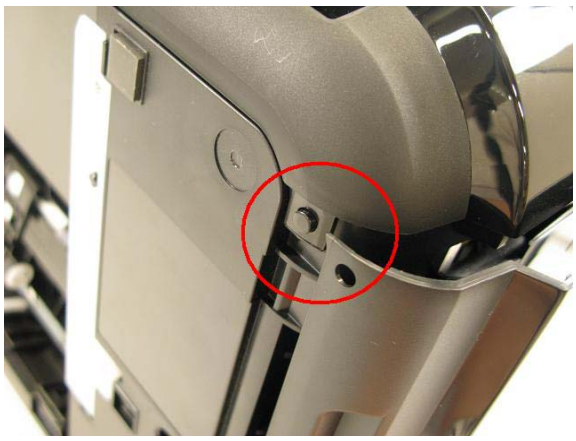






5) Remove the side cover R.

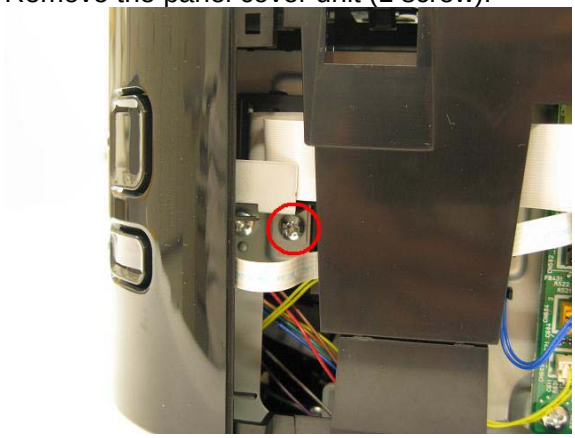


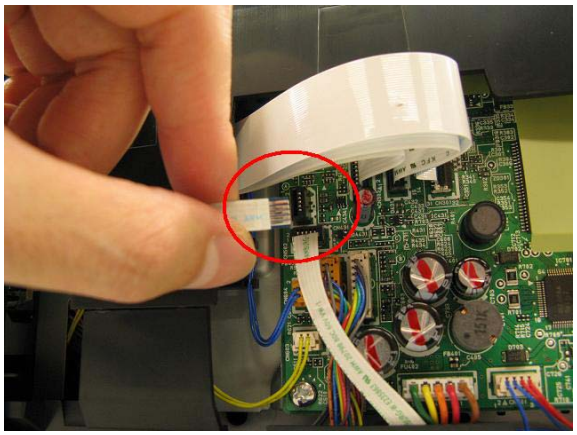


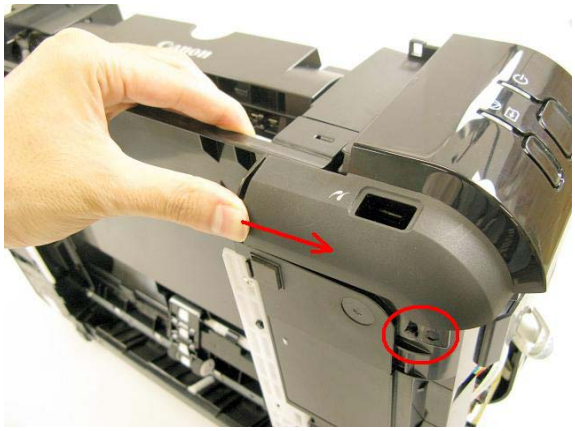
6) Remove the front door unit.

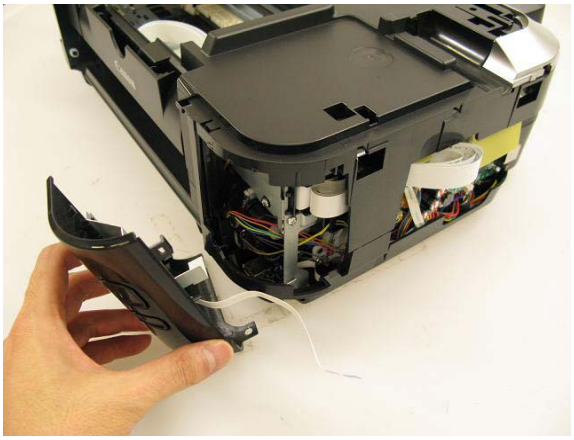
< While slightly warping the center of the paper output tray downward, release the left and right bosses. >

7) Remove the panel cover unit (1 screw).

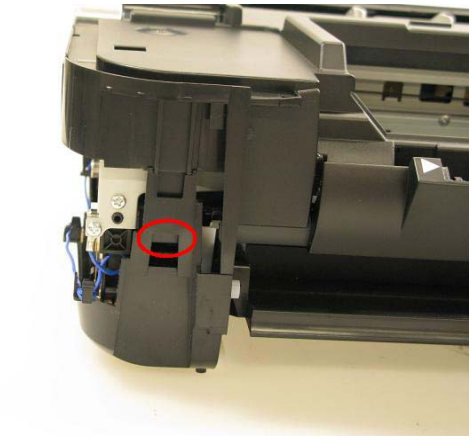


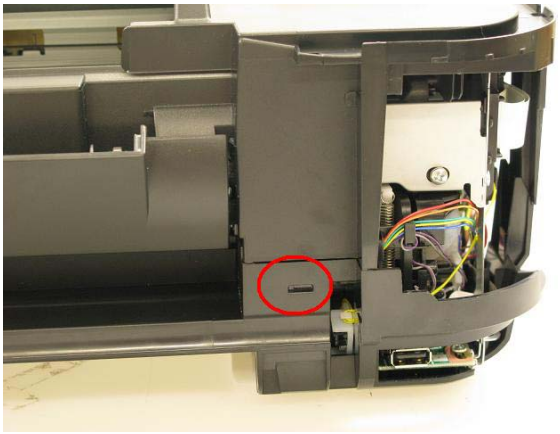


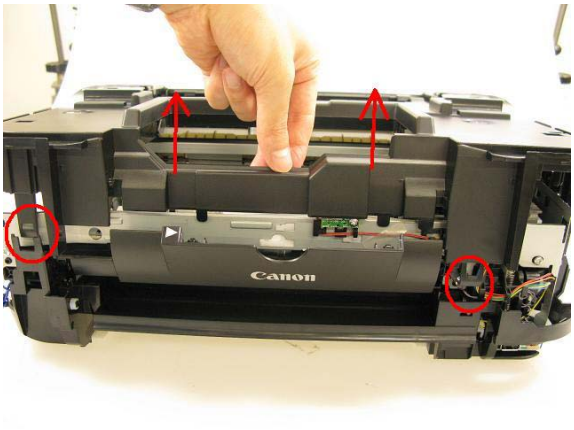


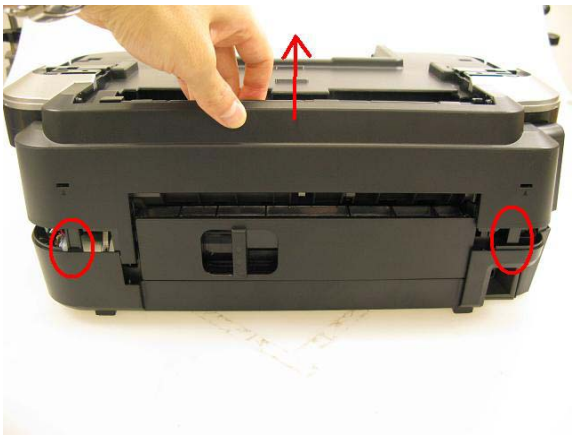


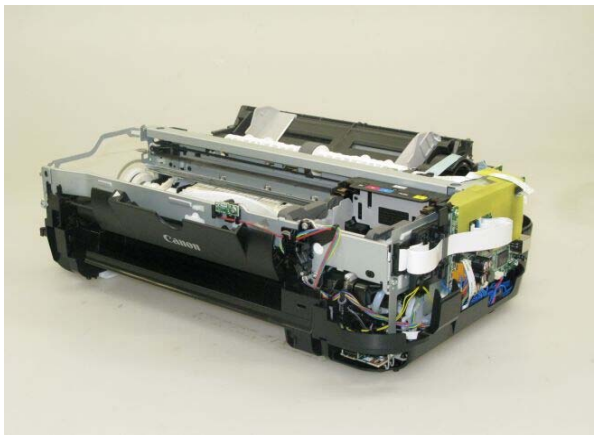
8) Remove the main case unit.

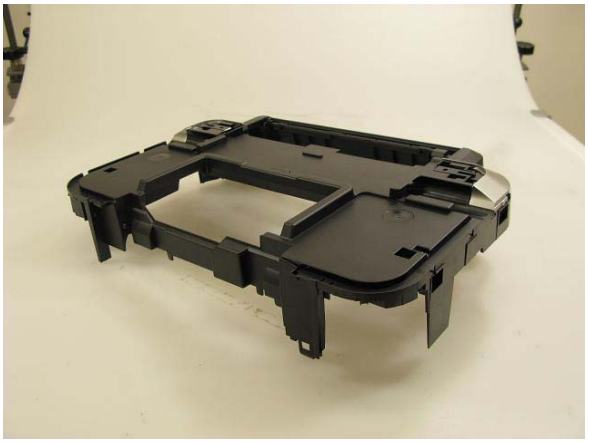












(2) Notes on Service Part Replacement (and Disassembling / Reassembling)

Service part	Notes on replacement[*1]	Adjustment / settings	Operation check
Logic board ass'y	- Before removal of the logic board ass'y, remove the power cord, and allow for approx. 1 minute (for discharge of capacitor's accumulated charges), to prevent damages to the logic board ass'y. - Before replacement, check the ink absorber counter value (by service test print or EEPROM information print).	**After replacement:** 1) Initialize the EEPROM. 2) Set the ink absorber counter value. 3) Set the destination in the EEPROM. 4) Correct the CD / DVD and automatic print head alignment sensors. 5) Check the ink system function. 6) Perform LF / Eject correction (only when streaks or uneven printing occurs). Perform 1 to 6 in the service mode. 7) Perform print head alignment in the user mode.	- EEPROM information print - Service test print - Printing via USB connection - Direct printing from a digital camera (PictBridge)
Absorber kit		**After replacement:** 1) Reset the ink absorber counter.	- Ink absorber counter volume print (After the ink absorber counter is reset, the counter value is printed automatically.)
Carriage unit		**At replacement:** 1) Before removal of the carriage rail, mark the carriage rail position. 2) Apply grease to the sliding portions of the carriage rail. [See 2-2. Adjustment / Settings, (2) Grease application] 3) Check the ink system function. 4) Perform print head alignment in the user mode.	- Service test print (Confirm CD / DVD and automatic print head alignment sensor correction, and ink system function.)
Switch system unit	- The red screws securing the paper feed motor are allowed to be loosened only for paper feed motor replacement. (DO NOT loosen them in any other cases.)	**At replacement:** 1) Adjust the paper feed motor.	- EEPROM information print - Service test print
Paper feed motor			
Platen unit		**After replacement:** 1) Perform LF / Eject correction in the service mode (only when streaks or uneven printing occurs).	- EEPROM information print - Service test print

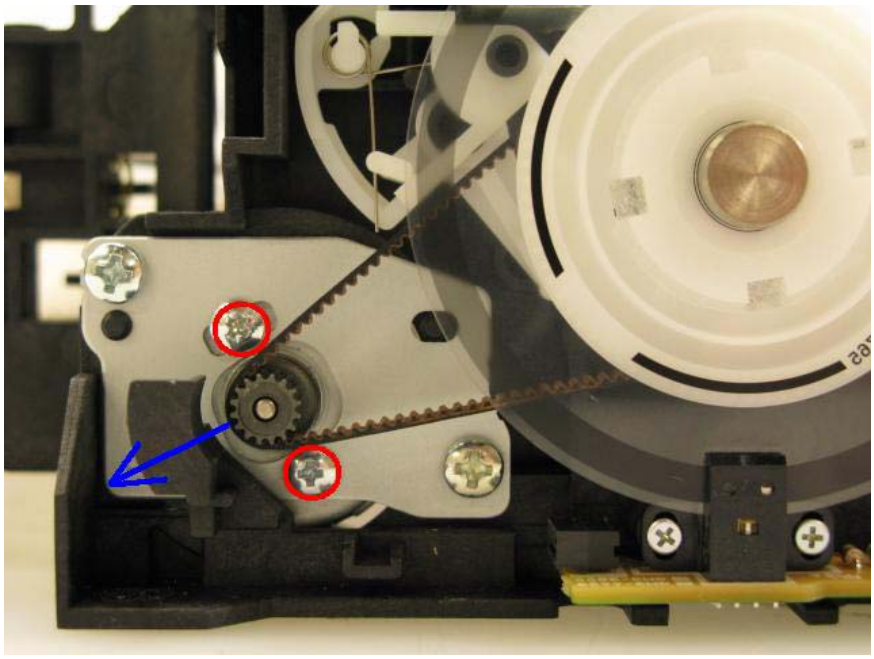
Service part	Notes on replacement[*1]	Adjustment / settings	Operation check
Spur unit	- DO NOT contact the spur edges.	**After replacement:** 1) Check the ink system function. 2) Perform LF / Eject correction in the service mode (only when streaks or uneven printing occurs).	- EEPROM information print - Service test print
Purge drive system unit		**After replacement:** 1) Confirm the purging operation and the printer operation.	- Service test print
Carriage rail and main chassis Idler pulley parallel pin Easy-Scroll Wheel base APP code wheel gear shaft		**At replacement:** 1) Apply grease to the sliding portions.	- Service test print
Timing slit strip film Timing slit disk feed film Timing slit disk eject film	- Upon contact with the film, wipe the film with ethanol. - Confirm no grease is on the film. (Wipe off any grease thoroughly with ethanol.) - Do not bend the film.	**After replacement:** 1) Perform print head alignment in the user mode. 2) Perform LF / Eject correction in the service mode (only when streaks or uneven printing occurs).	- EEPROM information print - Service test print
Print head		**After replacement:** 1) Perform print head alignment in the user mode.	- Service test print

***1: General notes:**

- Make sure that the flexible cables and wires in the harness are in the proper position and connected correctly.
- Do not drop the ferrite core, which may cause damage.
- Protect electrical parts from damage due to static electricity.
- Before removing a unit, after removing the power cord, allow the printer to sit for approx. 1 minute (for capacitor discharging to protect the logic board ass'y from damages).
- Do not touch the timing slit strip film, timing slit disk feed film, and timing slit disk eject film. No grease or abrasion is allowed.
- Protect the units from soiled with ink.
- Protect the housing from scratches.
- For the the iP4700 / iP4760 automatic print head alignment, use Matte Photo Paper (MP-101) to ensure alignment accuracy.
- Exercise caution with the screws, as follows:
    i. The screws of the paper feed motor may be loosened only at replacement of the paper feed motor unit (DO NOT loosen them in other cases).
    ii. Before loosening the 3 screws that fix the carriage rail to the main chassis, mark the screw positions so that the carriage rail will be re-attached to the main chassis in its original position.

(3) Paper feed motor adjustment

1) When attaching the motor, fasten the screws so that the belt is properly stretched (in the direction indicated by the blue arrow in the photo below).
2) After replacement, be sure to perform the service test print, and confirm that no strange noise or faulty print operation (due to dislocation of the belt or gear, or out-of-phase motor, etc.) occurs.



Caution: The screws securing the paper feed motor may be loosened only at replacement of the paper feed motor unit. DO NOT loosen them in other cases.

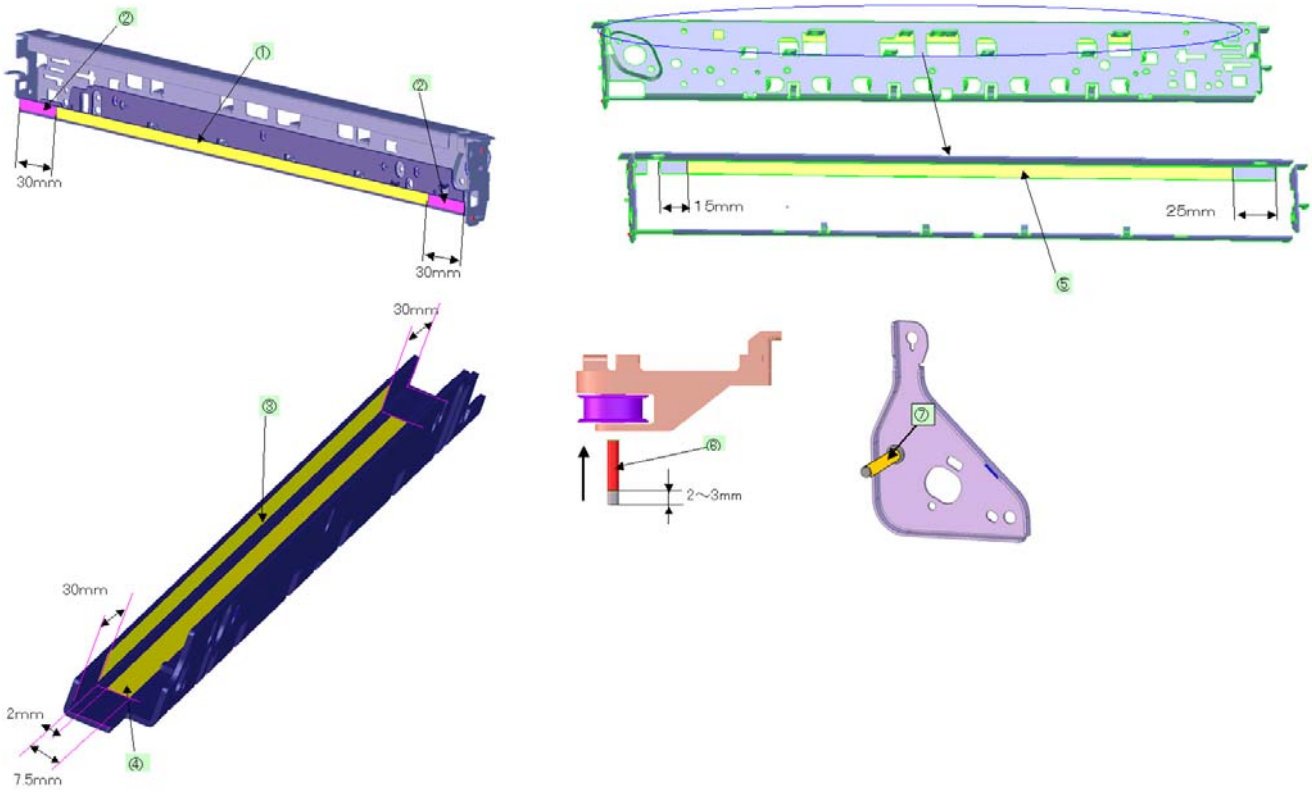
(4) Ink absorber counter setting

Before replacement of the logic board, check the ink absorber counter value, and register it to the replaced new logic board. (The value can be set in 10% increments.)
In addition, according to the ink absorber counter value, replace the ink absorber (ink absorber kit).
When the ink absorber is replaced, reset the applicable ink absorber counter (to 0%).

2-4. Grease application

No	Part name	Where to apply grease / oil	Drawing No.	Grease	Grease amount (mg)	Number of drops x locations
1	Carriage rail	The surface where the carriage unit slides	(1)	Floil KG107A	270 to 330	---
2	Carriage rail	The surface where the carriage unit slides	(2)	Floil KG107A	18 to 36	1 x 2
3	Carriage rail	The surface where the carriage unit slides	(3)	Floil KG107A	360 to 440	---
4	Carriage rail	The surface where the carriage unit slides	(4)	Floil KG107A	360 to 440	---
5	Main chassis	The surface where the carriage unit slides	(5)	Floil KG107A	230 to 290	---
6	Parallel pin	The pin surface which contacts the idler pulley hole	(6)	Floil KG107A	9 to 18	1 x 1
7	APP code wheel gear shaft	APP code wheel gear sliding portion (the entire surface)	(7)	Floil KG107A	9 to 18	1 x 1

1 drop = 9 to18 mg



2-5. Notes on Transportation

This section describes the procedures for transporting the printer for returning after repair, etc.

1) In the service mode, press the Power button to finish the mode, and confirm that the paper lifting plate of the rear tray is raised.
2) Keep the print head and ink tanks installed in the carriage. See Caution (a) below.
3) Turn off the printer to securely lock the carriage in the home position. (When the printer is turned off, the carriage is automatically locked in place.) See Caution (b) below.

Caution: a. If the print head is removed from the printer and left alone by itself, ink (the pigment-based black ink in particular) is likely to dry. For this reason, keep the print head installed in the printer even during transportation.

b. Securely lock the carriage in the home position, to prevent the carriage from moving and applying stress to the carriage flexible cable, or causing ink leakage, during transportation.

Note: If the print head must be removed from the printer and transported alone, attach the protective cap (used when the packing was opened) to the print head (to protect the print head face from damage due to shocks).